Comparisons of Job Characteristics

Focus Occupation: Mathematical Science Teachers, Postsecondary (25-1022) Associated Occupation: Business Teachers, Postsecondary (25-1011)

Compare Knowledge Compare Skills Compare Abilities Compare Detailed Work Activities Compare Tools and Technologies

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

Knowledge

Similarity of Focus Occupation to Associated Occupation: 70

Focus Occupation: Mathematical Science Teachers, Postsecondary (25-1022) Associated Occupation: Business Teachers, Postsecondary (25-1011)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation	
Education and Training	9.2	21.2	19.8	0	Current knowledge level may be sufficient	
English Language	11.2	19.0	14.1	<<	Extensive education and/or training may be required	
Economics and Accounting	4.4	15.2	2.2	<<	Extensive education and/or training may be required	
Computers and Electronics	8.4	14.6	12.3	<	Expanded education and/or training may be required	
Mathematics	9.2	14.6	23.8	>>	Current knowledge level is likely more than sufficient	
Administration and Management	8.4	13.6	5.9	<<	Extensive education and/or training may be required	
Clerical	7.3	11.2	6.7	<<	Extensive education and/or training may be required	
Sales and Marketing	5.2	10.8	2.5	<<	Extensive education and/or training may be required	
Personnel and Human Resources	5.6	10.6	5.1	<<	Extensive education and/or training may be required	
Communications and Media	5.3	10.1	6.1	<<	Extensive education and/or training may be required	
Sociology and Anthropology	4.1	9.2	4.5	<<	Extensive education and/or training may be required	

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation: 96

Focus Occupation: Mathematical Science Teachers, Postsecondary (25-1022) Associated Occupation: Business Teachers, Postsecondary (25-1011)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation	
Speaking	10.8	16.6	16.3	0	Current skill level may be sufficient	
Reading Comprehension	10.7	16.2	15.5	0	Current skill level may be sufficient	
Writing	9.2	15.2	14.6	0	Current skill level may be sufficient	
Instructing	7.8	14.2	12.8	<	A higher skill level may be required	
Critical Thinking	10.8	14.1	14.2	0	Current skill level may be sufficient	
Learning Strategies	7.2	13.8	12.3	<	A higher skill level may be required	
Active Learning	8.7	12.8	13.0	0	Current skill level may be sufficient	
Judgment and Decision Making	9.4	12.6	11.5	0	Current skill level may be sufficient	

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Abilities

Similarity of Focus Occupation to Associated Occupation: 95

Focus Occupation: Mathematical Science Teachers, Postsecondary (25-1022) Associated Occupation: Business Teachers, Postsecondary (25-1011)

Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation	
Oral Expression	12.4	19.0	17.5	0	Current ability level may be sufficient	
Written Expression	9.8	16.8	14.2	<	Some improvement in abilities may be required	
Written Comprehension	11.0	16.7	15.1	<	Some improvement in abilities may be required	
Oral Comprehension	12.5	16.5	14.9	<	Some improvement in abilities may be required	
Speech Clarity	10.2	15.7	16.2	0	Current ability level may be sufficient	
Deductive Reasoning	10.6	14.4	13.6	0	Current ability level may be sufficient	
Inductive Reasoning	10.2	13.5	13.5	0	Current ability level may be sufficient	
Memorization	5.6	7.9	7.7	0	Current ability level may be sufficient	

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common

Similarity of Focus
Occupation to Associated
Occupation: 95

Focus Occupation: Mathematical Science Teachers, Postsecondary (25-1022) Associated Occupation: Business Teachers, Postsecondary (25-1011)

Work Activities	Exclusivity of Activity
Advise governmental or industrial personnel	28
Advise students	49
Collect academic research data	62
Compile bibliographies of specialized materials	54

Conduct research on work-related topics	44
Convert information into instructional program	38
Design classroom presentations	45
Develop course or training objectives	42
Develop instructional materials	38
Direct and coordinate scientific research or investigative studies	27
Encourage group participation	54
Evaluate student performance	46
Maintain educational records, reports, or files	43
Make education presentations	46
Organize educational material or ideas	41
Prepare educational reports	44
Record student progress	46
Teach college level courses	54
Use computers to enter, access or retrieve educational data	46
Use oral or written communication techniques	1
Use public speaking techniques	13
Use teaching techniques	29
Write research or project grant proposals	33
Write scholarly or technical research papers	36

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Tools and Technologies that Both Occupations Have in Common

Similarity of Focus
Occupation to Associated
Occupation: n/a

Focus Occupation: Mathematical Science Teachers, Postsecondary (25-1022) Associated Occupation: Business Teachers, Postsecondary (25-1011)

	Tools and Technologies	Exclusivity
ĺ	Tools and technology data is unavailable for one or both occupations.	

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.